

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A ~~product for an electrochemical~~ fuel cell including a bipolar plate including a sheet metal product having a conductive and corrosion-resistant protective coating including a metal oxide on at least one side, with the metal oxide having a treatment ~~which ensures conductivity~~ that produces a crystal structure of the metal oxide coating which ensures conductivity.

2. (cancelled)

3. (currently amended) A ~~product~~ fuel cell in accordance with claim 1 wherein the treatment ~~takes the forms of~~ includes a galvanic coating consisting of one of the elements aluminum, chromium, silver, antimony or molybdenum applied directly below the metal oxide coating.

4. (currently amended) A ~~product~~ fuel cell in accordance with claim 1 wherein the treatment is executed as a doping.

5. (currently amended) A product in accordance with claim [4] 1 wherein the protective coating consists of at least one layer.

6. (currently amended) A ~~product~~ fuel cell in accordance with claim 4 wherein the protective coating comprises an oxide of one of the following elements or alloys of these elements: tin, zinc, indium.

7. (currently amended) A ~~product~~ fuel cell in accordance with claim 4 wherein the protective coating comprises a first layer of a metal oxide, a second layer of a dopant which ensures conductivity, and a third layer of a metal oxide.

8. (currently amended) A ~~product~~ fuel cell in accordance with claim 1 wherein the protective coating comprises an alternating layer sequence of metal oxide and dopants which ensure conductivity.

9. (currently amended) A ~~product~~ fuel cell in accordance with claim 1 wherein the protective coating comprises at least two layers.

10. (currently amended) A ~~product~~ fuel cell in accordance with claim 4 wherein the doping ~~which ensures the conductivity~~ comprises at least one element of the group aluminum, chromium, silver, boron, fluorine, antimony, chlorine, bromine, phosphorus, molybdenum and/or carbon.

11. (currently amended) A ~~product~~ fuel cell in accordance with claim 1 wherein the protective coating comprises a protective coating deposited in a vacuum chamber.

12. (currently amended) A ~~product~~ fuel cell in accordance with claim 1 wherein the protective coating has a thickness in the range between 1 monolayer and 1 μ , preferably between approximately 1 nm and approximately 500 nm.

13. (currently amended) A ~~product~~ fuel cell in accordance with claim 1 wherein the sheet metal comprises aluminum, chrome-plate aluminum, copper, stainless steel, chrome-plated stainless steel, titanium, titanium alloys and iron-containing compounds both with and without metallic coating, with the metallic coating including at least one of the elements tin, zinc, nickel, chromium or alloys of these materials.

14. (currently amended) A ~~product~~ fuel cell in accordance with claim 1 wherein the sheet metal product has a thickness in the range from about 0.001 mm to about 5 mm.

15. (new) A product for an electrochemical cell including a bipolar plate including a sheet metal product having a conductive and corrosion-resistant protective coating including a metal oxide on at least one side, with the metal oxide having a treatment which ensures conductivity,

wherein the treatment is executed as a doping; and

wherein the protective coating comprises a first layer of a metal oxide, a second layer of a dopant which ensures conductivity, and a third layer of a metal oxide.

16. (new) A product for an electrochemical cell including a bipolar plate including a sheet metal product having a conductive and corrosion-resistant protective coating including a metal oxide on at least one side, with the metal oxide having a treatment which ensures conductivity,

wherein the protective coating comprises an alternating layer sequence of metal oxide and dopants which ensure conductivity.